

## PATENT COOPERATION TREATY

DIARIED

From the:  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:  
Griffith Hack  
GPO Box 1285K  
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GRIFFITH HACK

24 JAN 2006

1. Ree  
2. SSB  
3. SSB

PCT

ID. 387213

WRITTEN OPINION OF THE INTERNATIONAL  
PRELIMINARY EXAMINING AUTHORITY

(PCT Rule 66)

Date of mailing  
(day/month/year)

23 JAN 2006

Applicant's or agent's file reference  
JSB:SP:FP20705

REPLY DUE within **ONE MONTHS**  
from the above date of mailing

International application No.

PCT/AU2004/001577

International filing date (day/month/year)

15 November 2004

Priority date (day/month/year)

14 November 2003

International Patent Classification (IPC) or both national classification and IPC

INT. CL. C12N 1/00 (2006.01) C12N 1/26 (2006.01)  
C12N 1/20 (2006.01) C12N 1/38 (2006.01)

Applicant

COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION et al

1. ☒ The written opinion established by the International Searching Authority:

☒ is ☐ is not

considered to be a written opinion of the International Preliminary Examining Authority.

2. This **THIRD** (second, etc.) opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion  
☐ Box No. II Priority  
☒ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  
☐ Box No. IV Lack of unity of invention  
☐ Box No. V Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement  
☐ Box No. VI Certain documents cited  
☐ Box No. VII Certain defects in the international application  
☐ Box No. VIII Certain observations on the international application

The applicant is hereby invited to reply to this opinion.

**When?** See the **Reply Due** date indicated above. However, the Australian Patent Office will not establish the Report before the earlier of (i) a response being filed, or (ii) one month before the **Final Date** by which the international preliminary examination report must be established. The Report will take into account any response (including amendments) filed before the Report is established. **If no response is filed by 1 month before the Final Date**, the international preliminary examination report will be established on the basis of this opinion.

Applicants wishing to have the benefit of a further opinion (if needed) before the report is established should ensure that a response is filed at least **3 months before the Final Date** by which the international preliminary examination report must be established.

**How?** By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

**Also** For an additional opportunity to submit amendments, see Rule 66.4.  
For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4bis.  
For an informal communication with the examiner, see Rule 66.6.

4. The **FINAL DATE** by which the international preliminary report on patentability (Chapter II of the PCT) must be established according to Rule 69.2 is: 14 March 2006

Name and mailing address of the IPEA/AU

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WRITTEN OPINION OF THE  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

International application No.

PCT/AU2004/001577

Box No. I Basis of the opinion

1. With regard to the language, this opinion has been established on the basis of:

- ☒ The international application in the language in which it was filed:
- ☐ A translation of the international application into \_\_\_\_\_, which is the language of a  
translation furnished for the purposes of:
- ☐ international search (under Rules 12.3(a) and 23.1 (b))
- ☐ publication of the international application (under Rule 12.4(a))
- ☐ international preliminary examination (Rules 55.2(a) and/or 55.3(a))

2. With regard to the elements of the international application, this opinion has been established on the basis of *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed.")*:

- ☐ the international application as originally filed/furnished
- ☒ the description: pages **1, 2, 4-62**, as originally filed/furnished  
pages **3**, received by this Authority on **25-08-05** with the letter of 25-08-05  
pages \_\_\_\_\_, received by this Authority on \_\_\_\_\_ with the letter of \_\_\_\_\_
- ☒ the claims: pages \_\_\_\_\_, as originally filed/furnished  
pages \_\_\_\_\_, as amended (together with any statement) under Article 19,  
pages **63**, received by this Authority on **14-12-05** with the letter of 14-12-05  
pages \_\_\_\_\_, received by this Authority on \_\_\_\_\_ with the letter of \_\_\_\_\_
- ☒ the drawings: pages **1/12/-12/12**, as originally filed/furnished  
pages \_\_\_\_\_, received by this Authority on \_\_\_\_\_ with the letter of \_\_\_\_\_  
pages \_\_\_\_\_, received by this Authority on \_\_\_\_\_ with the letter of \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to the sequence listing (*specify*): \_\_\_\_\_

4. ☐ This opinion has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to the sequence listing (*specify*): \_\_\_\_\_

WRITTEN OPINION OF THE  
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International application No.

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**Box No. III**      **Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application

☒ claims Nos: **1-25**

because:

☐ the said international application, or the said claim Nos.

relate to the following subject matter which does not require an international preliminary examination (*specify*):

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos.  
are so unclear that no meaningful opinion could be formed (*specify*):

☐ the claims, or said claims Nos.  
are so inadequately supported by the description that no meaningful opinion could be formed (*specify*):

☒ no international search report has been established for said claim Nos. **1-25**. See Supplemental Box 1.

☐ A meaningful opinion could not be formed without the sequence listing; the applicant did not, within the prescribed time limit:

☐ Furnish a sequence listing on paper complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Preliminary Examining Authority in a form and manner acceptable to it.

☐ Furnish a sequence listing in electronic form complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Preliminary Examining Authority in a form and manner acceptable to it.

☐ Pay the required late furnishing fee for the furnishing of a sequence listing in response to an invitation under Rules 13ter.1(a) or (b) and 13ter.2.

☐ A meaningful opinion could not be formed without the tables related to the sequence listings; the applicant did not, within the prescribed time limit, furnish such tables in electronic form complying with the technical requirements provided for in Annex C-bis of the Administrative Instructions, and such tables were not available to the International Preliminary Examining Authority in a form and manner acceptable to it.

☐ the tables related to the nucleotide and/or amino acid sequence listing, if in electronic form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.

☐ See Supplemental Box for further details.

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International application No.

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**Box No. V** Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

**1. Statement**

Novelty (N)	Claims	YES
	Claims	NO
Inventive step (IS)	Claims	YES
	Claims	NO
Industrial applicability (IA)	Claims	YES
	Claims	NO

**2. Citations and explanations:**

No opinion offered as to novelty, inventive step or industrial applicability of the present claims. See Supplemental Box 1

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Supplemental Box 1

In case the space in any of the preceding boxes is not sufficient.

Continuation of:-

**Non-Establishment of Opinion with Regard to Novelty, Inventive Step and Industrial Applicability.**

The original claims on which the International Search was established were directed to methods of selectively enriching microorganisms to metabolise a test substrate, wherein assessment of enrichment was monitored using a "signal indicative of the level of a **metabolism indicator**". The term "metabolism indicator" is a very broad term covering a large range of possible indicators.

The present claims are directed to methods of selectively enriching microorganisms to metabolise a test substrate, wherein assessment of enrichment is monitored using a "signal indicative of the level of a **metabolism indicator which is a terminal electron acceptor**".

The International Search was broadly directed to assessing the novelty of monitoring microbial enrichment using signals indicative of metabolism indicators. It was not focussed on metabolism indicators that are terminal electron acceptors. Thus, all features of the present claims were not searched, and no opinion can be offered on the novelty, inventiveness or industrial applicability of the present claims.